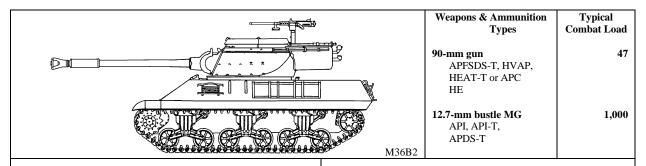
U.S. Self-Propelled Antitank Gun M36



SYSTEM

Alternative Designations: INA Date of Introduction: 1944 Proliferation: At least 5 countries

Description: Crew: 5

Combat Weight (mt): 27.7/30.8 for M36B1/29.9 for M36B2

Chassis Length Overall (m): 5.98 Height Overall (m): 3.19 Width Overall (m): 3.05

Ground Pressure (kg/cm²): 0.95/0.86 M36B2

Automotive Performance:

Engine Type: 500-hp Gasoline/375-hp Diesel for M36B2

Chassis: M-10 tank destroyer Cruising Range (km): 177

Speed (km/h):

Max Road: 42/40 M36B2 Max Off-Road: INA Average Cross-Country: 29 Max Swim: N/A

Fording Depth (m): 0.91/1.07 M36B2

Radio: INA

Protection:

Armor, Turret Front (mm): 76 Applique Armor (mm): N/A Explosive Reactive Armor (mm): N/A Active Protective System: N/A Mineclearing Equipment: N/A Self-Entrenching Blade: N/A NBC Protection System: No Smoke Equipment: No

ARMAMENT

Main Armament:

Caliber, Type, Name: 90-mm (50 Cal) rifled gun, M3

Rate of Fire (rd/min): 8 est Loader Type: Manual Ready/Stowed Rounds: INA Elevation (°): -10 to +20

Fire on Move: No

Auxiliary Weapon:

Caliber, Type, Name: 12.7-mm machinegun, M2HB

Mount Type: Turret bustle

Maximum Aimed Range (m): 2,000

Max Effective Range (m):
Day: 2,000
Night: N/A
Fire on Move: Yes

Fire on Move: Yes Rate of Fire (rd/min): 550

ATGM Launcher: None

FIRE CONTROL FCS Name: INA

Main Gun Stabilization: No

Rangefinder: No

Infrared Searchlight: No **Sights w/Magnification:**

Gunner: Day: INA Night: No

Commander Fire Main Gun: No

VARIANTS

M36B1: Variant uses an M4A3/Sherman tank chassis.

M36B2: Variant uses an M10 chassis with plate canopy protection.

MAIN ARMAMENT AMMUNITION

Caliber, Type, Name: 90-mm HVAP, INA

Maximum Aimed Range (m): INA Max Effective Range (m):

Day: 1,000 Night: N/A

Armor Penetration (mm): 195 at 1,000 m

90-mm APFSDS-T, Mecar 90

Maximum Aimed Range (m): 1,000-2,000

Max Effective Range (m): Day: 1,000+ Night: N/A

Armor Penetration (mm): INA

90-mm HEAT-T, Yugoslavian M74

Maximum Aimed Range (m): INA Max Effective Range (m):

Day: 1,000 Night: N/A

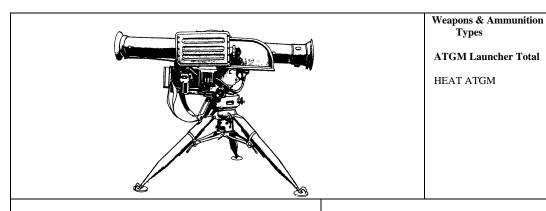
Armor Penetration (mm): 150 (30° impact) at 1,000 m

Other Ammunition Types: HE M71, APC-T M82

NOTES

This type vehicle is historically referred to as a "tank destroyer". The above label is more modern. The baseline vehicle has an open-top turret.

Chinese ATGM Launcher Red Arrow-8



Typical Combat Load

Ground 1-5

Vehicle 8-12

SYSTEM

Alternative Designations: Hongjian-8, RA-8, HJ-8

Date of Introduction: 1986 **Proliferation:** At least 4 countries

Description: Crew: 4

Primary Mount: Ground mount on tripod, including operator prone Alternate Mounts: APC, ATGM Launcher Vehicle, jeep, helicopter

Weight Overall, Excluding Missile (kg): 63

Length Overall in Firing Position (m): 1.57 (missile canister)

Height Overall In Firing Position (m): INA Width Overall In Firing Position (m): INA

ARMAMENT

Launcher

Name: Red Arrow 8

Launch Method: Tube-launched from carrying canister

Elevation (°) (-/+): -7 to +12

Rate of Launch: (missiles/min): 2-3, depending on range

Reaction Time (sec): INA Emplacement Time (min): INA Displacement Time (min): INA Ready/Stowed Missiles: INA

FIRE CONTROL

FCS Name:

Guidance: SACLOS Command Link: Wire

Beacon Type: Incandescent infrared bulb

Tracker Type: IR

Susceptible To Countermeasures: IR jammer, smoke, counterfire

Counter-countermeasures: Jamming CM (NFI)

Rangefinder: INA

Sights w/Magnification:

Gunner

Day: Name INA, 12x Field of View (°): INA Acquisition Range (m): INA

Night: PTI-32 Thermal sight available (copy of Thorn EMI)

Field of View (°): INA

Acquisition Range (m): 4,000 detection/2,000 identification

VARIANTS

Baktar Shikan: Pakistani variant, also called Green Arrow. Missile

data is similar to Red Arrow-8A

AMMUNITION

Antitank Guided Missiles

Name: Red Arrow-8A

Alternative Designation: HJ-8A

Missile Weight (kg): 24.5 (in tube), 22.5 ready for launch

Warhead Type: Shaped Charge (HEAT)

Armor Penetration (mm): 800

Minimum/Maximum Range (m): 100/3,000

Probability of Hit (%): 90 Average Velocity (m/s): 220

Time of Flight to Max Range (sec): 13.6

Name: Red Arrow-8E

Alternative Designation: HJ-8E

Missile Weight (kg): 24.5 (in tube), 22.5 ready for launch

Warhead Type: Tandem Shaped Charge (HEAT)

Armor Penetration (mm): 900

Minimum/Maximum Range (m): 100/4,000

Probability of Hit (%): 90 Average Velocity (m/s): 210

Time of Flight to Max Range (sec): 19

Other Missiles: There may be -8, -8B and -8C versions of the ATGM;

however, the above are more likely for encounter.

NOTES

Although the launcher is portable, it too heavy for one-man carry. Vehicle mounts are jeeps, such as the Chinese BJ-212 and BJ 2023 C, and APCs such as the Chinese WZ-551 and Type 90 APC. A Chinese four launcher turret has been fitted on ATGM launcher vehicles including the Chinese YW 531, WZ-551, and YW 534, and Chilean Piranha. Helicopter mounts are the Chinese Zhi-9 (license-built SA-354N/Dauphin 2) and French Antelone